

REMARKS

Applicants respectfully request entry of the foregoing and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow.

Claims 15-37 are pending in the application.

By the above amendments, Applicants amended Claim 15 to further clarify that cooling of the expanded material is achieved using a liquid. Support for this amendment can be found at least at page 8, lines 1-14 and 25-26 of the specification and at Examples 1 and 2. A claim that has been amended in a manner that does not narrow the claim's scope should be accorded its full range of equivalents.

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119 and for indicating that all certified copies of the priority documents have been received from the International Bureau. In addition, Applicants thank the Examiner for the Examiner-initialed Form PTO 1449, which was submitted with Applicants' First Information Disclosure Statement on December 23, 2005.

Turning now to the Official Action, the specification stands objected to for including various informalities. Applicants have amended the specification where appropriate to address these informalities.

In view of the foregoing amendments, Applicants respectfully request reconsideration and withdrawal of the objection to the specification.

Claims 15-18, 20-22, 25, 29 and 32-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pontiff (EP0450205). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent claim 15, as amended above, recites a process for preparing a pearl based on expanded polymer and having a continuous skin, comprising the following successive steps:

a) extruding an expandable composition comprising a thermoplastic polymer and an expanding agent, in molten state, to effect expansion thereof, and

b) cooling using a liquid and chopping the expanded material thus obtained.

(Emphasis added.)

Pontiff relates to a process for producing shrunken moldable beads of foamed thermoplastic polymers, e.g., polyolefins, and particularly beads of crosslinked polyolefins. (See Pontiff at page 1, lines 5-10.)

It is well-established that in order to demonstrate anticipation under § 102(b), each feature of the claim at issue must be found, either expressly described or under principles of inherency, in a single prior art reference. (See *Kalman v. Kimberly-Clark Corp.*, 218 U.S.P.Q. 789 (Fed. Cir. 1983).) That is not the case here.

For example, claim 15 specifically states that an expandable composition comprising a thermoplastic polymer and an expanding agent is first extruded in a molten state to effect expansion and subsequently cooling the expanded material using a liquid. Applicants respectfully submit that Pontiff fails to disclose or fairly suggest the combination of features recited in independent claim 15 including a step of cooling an expanded material using a liquid. In particular, as explained at page 8, lines 19-20 of the specification, the step of cooling recited in independent claim 15 sets the expanded material (substantially preventing further modification).

Applicants have discovered that this allows one to obtain pearls based on an expanded polymer having a substantially continuous skin. (See specification, for

lines 28-32 and Fig. 1). In stark contrast, Pontiff, after expansion and chopping, permits beads to shrink for a period of fifteen (15) minutes or more during which time dimples, wrinkles and the like form on the surface of the beads. (See Pontiff, for example, at page 6, lines 31-32 and Fig. 1.)

For at least these reasons, claim 15 is patentable over Pontiff. In addition, the remaining claims (claims 16-37) depend, directly or indirectly, from claim 15 and are, therefore, also patentable over Pontiff for at least the reasons that claim 15 is patentable. Reconsideration and withdrawal of the § 102(b) rejection over Pontiff are respectfully requested.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pontiff in view of Amano (U.S. Patent No. 5,234,640). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent claim 15 is recited above. Claim 19 depends directly from claim 15 and, therefore, necessarily includes each feature in the combination of features recited in claim 15.

Pontiff is discussed above.

Amano relates to a process for providing a thermoplastic polyester series resin foamed material or molding thereof. (See Amano at col. 1, lines 5-8).

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claimed features. See *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). In addition, "all words in a claim must be considered in judging the patentability of that claim against the prior art." See *In re Wilson*, 424 F.2d 1382, 1385; 165 U.S.P.Q. 494, 496 (C.C.P.A.

1970). See also MPEP § 2143.03. Applicants submit that these requirements have not been met.

As explained above, Pontiff fails to disclose or fairly suggest a process that includes a step of cooling an expanded material using a liquid in combination with the other features recited in independent claim 15, which are necessarily present in dependent claim 19. Amano does not overcome this deficiency. For at least these reasons, the combination of Pontiff and Amano cannot be relied upon to establish a *prima facie* case of obviousness because it does not teach or suggest all of the claimed features. Furthermore, Pontiff does not reflect a proper consideration of "all words" in claim 19, including the words of claim 15, which are necessarily included in claim 19 by virtue of its dependence on claim 15.

For at least these reasons, claim 19 is patentable over Pontiff. Reconsideration and withdrawal of the § 103(a) rejection over Pontiff are respectfully requested.

Claims 23-24 and 30-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pontiff in view of Al Ghatta (U.S. Patent No. 6,306,921). For at least the reasons that follow, withdrawal of the rejection is in order.

Independent claim 15 is recited above. Claims 23-24 and 30-31 depend, directly or indirectly, from claim 15 and, therefore, necessarily include all of the features recited in the combination of features recited in claim 15.

Pontiff is described above.

Al Ghatta relates to foamed beads of polyester resin to their method of preparation and to their use as loose fillers or for preparing molded foamed articles. (See Al Ghatta at column 1, lines 4-6.)

Again, to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all of the claimed features and there must be a proper consideration of "all words in a claim" when judging the patentability of that claim against the prior art. (See *In re Royka*, *In re Wilson* and MPEP § 2143.03.) Applicants submit that these requirements have not been met.

Applicants respectfully submit that Pontiff fails to disclose or fairly suggest the combination of features recited in claim 15, which are necessarily present in dependent claims 23-24 and 30-31. In particular, Pontiff fails to disclose or fairly suggest a process for preparing a pearl based on expanded polymer and having a continuous skin comprising the claimed successive steps wherein one of the steps is a step of cooling using a liquid. Al Ghatta does not overcome the deficiencies of Pontiff. That is, Al Ghatta relates to a method of producing foamed thermoplastic materials with the help of blowing agents but does not disclose or fairly suggest modifying Pontiff to arrive at the process recited in claim 15.

For at least these reasons, the combination of Pontiff and Al Ghatta cannot be relied upon to establish a *prima facie* case of obviousness because the asserted combination fails to disclose or fairly suggest all of the claimed features in claims 23-24 and 30-31, which necessarily include the features of independent claim 15. Furthermore, the recited combination of references does not reflect a proper consideration of all words in the claims (including the words of claim 15). For example, the asserted combination does not reflect proper consideration of "cooling using a liquid and chopping the expanded material thus obtained."

For at least these reasons, claims 23-24 and 30-31 are patentable over Pontiff in view Al Ghatta. Reconsideration and withdrawal of the rejection are respectfully requested.

From the foregoing, Applicants earnestly solicit further and favorable action in the form of a Notice of Allowance.

If there are any questions concerning this paper or the application in general, Applicants invite the Examiner to telephone the undersigned at the Examiner's earliest convenience.

Respectfully submitted,

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Date: September 18, 2008

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